

CLAIMS

What is claimed is:

1. An interface device for testing a telecommunication circuit, comprising:
a test cord with a first end integrated with said interface device and a second end terminating with a test connector;
at least two interfaces for selective attachment of a diagnostic tool, a first interface comprising a plurality of conductors, and a second interface comprising a jack; and
a first switch that may be selectively placed into at least one of a first and second positions;
wherein when said test connector is selectively connected to the telecommunication circuit at a point, operation of the circuit is monitored without disruption when the switch is in said first position and operation of the circuit is disrupted when the switch is in said second position, permitting analysis of the circuit on opposite sides of the point.
2. The interface device according to claim 1, wherein said test connector comprises a test probe for connecting to the telecommunications circuit.
3. The interface device according to claim 1, wherein said test connector comprises a test plug for connecting to the telecommunications circuit.

4. The interface device according to claim 1, wherein said test connector comprises a multi-pair plug for connecting to a plurality of communication circuits, and said interface device further comprises a second switch that may be selectively placed into one of a plurality of positions, each of said positions corresponding to one communication circuit of said plurality of communication circuits.
5. The interface device according to claim 4, wherein said second switch comprises a rotary switch.
6. The interface device according to claim 1, wherein each of said plurality of conductors comprises one of a stud, banana plug, test port and test lead.
7. The interface device according to claim 6, wherein said plurality of conductors comprises four studs, with two of said studs permitting analysis of a first side of the point and the other two of said studs permitting analysis of a second side of the point.
8. The interface device according to claim 1, wherein said jack is a RJ-11 type jack.
9. The interface device according to claim 1, wherein said first switch is one of a rocker-type switch, a toggle-type switch, rotary-type switch, and a button-type switch.

10. The interface device according to claim 1, further comprising an attachment mechanism for mounting said interface device onto a surface.
11. The interface device according to claim 10, wherein the telecommunication circuit point is associated with a connectivity block having a test port, said interface device being mounted nearby the connectivity block so that said test connector of said second end of said test cord may be selectively connected to the test port.
12. The interface device according to claim 10, wherein said attachment mechanism comprises one of screws, clips, magnets, and adhesive.
13. The interface device according to claim 10, wherein said attachment mechanism comprises a frame secured to the surface and upon which can be mounted at least one piece of telecommunications equipment.
14. A telecommunication system with testing capabilities, comprising:
 - a first telecommunication network for supplying voice and data services to a selected access point from a centralized location;
 - a second telecommunication network selectively connected to the first telecommunication network at said selected access point and used to distribute said services to end users;
 - one or more connectivity blocks associated with said selected access point that interface said first telecommunication network with said second telecommunication

network, each of said one or more connectivity blocks including one or more test ports;

and

an interface device for testing a telecommunication circuit, comprising:

a test cord with a first end integrated with said interface device and a second end terminating with a test connector;

a first interface comprising a plurality of conductors that allow for a selective attachment of a first diagnostic tool;

a second interface comprising a jack that allows for a selective attachment of a second diagnostic tool; and

a first switch that may be selectively placed into at least one of a first and second position;

wherein upon insertion of said test connector into one of said test ports, a user may configure said interface device to allow for monitoring of said telecommunication circuit without disrupting said circuit by placing said first switch in said first position, and configure said interface device to disrupt said telecommunication circuit and allow said user to examine both sides of said circuit by placing said first switch in said second position.

15. The telecommunication system as called for by claim 14, wherein said disruption of said telecommunication circuit includes the disconnection of said first telecommunication network from said second telecommunication network.

16. The telecommunications system as called for by claim 14, wherein said test connector comprises one of a test probe and a test plug.
17. The telecommunications system as called for by claim 16, wherein said test plug is a multi-pair plug for connecting to a plurality of said test ports, and said telecommunications system further comprises a second switch that may be placed into one of a plurality of positions, each of said positions corresponding to one communication circuit out of a plurality of communication circuits.
18. The telecommunication system as called for by claim 14, wherein each of said plurality of conductors comprises one of a stud, banana plug, test port and test lead.
19. The telecommunication system as called for by claim 14, wherein said jack is a RJ-11 type jack.
20. The telecommunication system as called for by claim 14, wherein said first switch is one of a rocker-type switch, a toggle-type switch, a rotary-type switch, and a button-type switch.
21. The telecommunication system as called for by claim 14, further comprising an attachment mechanism for mounting said interface device onto a surface.

22. The telecommunication system as called for by claim 21, wherein said attachment mechanism comprises one of screws, clips, magnets, and adhesives.

23. The telecommunication system as called for by claim 21, wherein said attachment mechanism comprises a frame secured to the surface and upon which can be mounted said one or more connectivity blocks.

24. The telecommunication system as called for by claim 14, wherein said interface device is mounted nearby said one or more connectivity blocks so that said test connector of said second end of said test cord may be selectively connected to said one or more test ports.

25. A method of testing a telecommunications circuit, comprising the steps of:
 inserting a test connector into a test port of a connectivity block, said test connector located at a free end of a test cord that is integrated with an interface device;
 connecting a diagnosis tool to one of a first interface and a second interface on said interface device;
 monitoring an operation of the telecommunications circuit without disrupting it by placing a switch on said interface device in a first state; and
 disrupting the telecommunication circuit by placing said switch on said interface device in a second state, permitting analysis of the telecommunication circuit on opposite sides of the connectivity block.

26. The method of testing a telecommunications circuit according to claim 25, further comprising the step of mounting said interface device onto a surface nearby the connectivity block.

27. An interface device for testing a plurality of telecommunication circuits, comprising:

a test cord with a first end integrated with said interface device and a second end terminating with a multi-pair plug capable of connecting to the plurality of telecommunication circuits;

at least two interfaces for selective attachment of a diagnostic tool, a first interface comprising a plurality of conductors, and a second interface comprising a jack; and

a switch that may be selectively placed into one of a plurality of positions, wherein any one of the plurality of communication circuits can be selected, by control of said switch, for either testing, whereby a selected communication circuit is disrupted, or monitoring, whereby the selected communication circuit is not disrupted.

28. The interface device according to claim 27, wherein said switch comprises a rotary switch.

29. The interface device according to claim 27, wherein each of said plurality of conductors comprises one of a stud, banana plug, test port and test lead.

30. The interface device according to claim 27, further comprising an attachment mechanism for mounting said interface device onto a surface.

31. An interface device for testing a plurality of telecommunication circuits, comprising:

a test cord with a first end integrated with said interface device and a second end terminating with a multi-pair plug capable of connecting to the plurality of telecommunication circuits; and

at least two interfaces for selective attachment of a diagnostic tool, a first interface comprising a plurality of conductors, and a second interface comprising a jack,

wherein upon connecting to said interface device, the diagnostic tool can select any one of the plurality of communication circuits for either testing, whereby a selected communication circuit is disrupted, or monitoring, whereby the selected communication circuit is not disrupted.

32. The interface device according to claim 31, wherein each of said plurality of conductors comprises one of a stud, banana plug, test port and test lead.

33. The interface device according to claim 31, further comprising an attachment mechanism for mounting said interface device onto a surface.